

ABSTRACT OF THE DISCLOSURE

An apparatus for use in a hybrid fiber coax (HFC) network provides the HFC forward path spectrum from the head end to a network fiber node. The apparatus includes a head end modulator. The modulator directly receives a switchable digital data signal and internally processes the switchable digital data signal to produce the HFC forward path spectrum that directly drives the node. The HFC forward path spectrum may be directly converted to an analog optical signal by the modulator itself or by an optical conversion device immediately following the modulator.